PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference | 1 | | | | | |
|---|--|--|--|--|--|--|
| W1.2099PCT | FOR FURTHER ACTION | See Form PCT/IPEA/416 | | | | |
| International application No. | International filing date (day/month/year) | Priority date (day/month/year) | | | | |
| PCT/EP2004/050378 | 26.03.2004 | 28.03.2003 | | | | |
| International Patent Classification (IPC) or nati | onal classification and IPC | | | | | |
| Applicant | | | | | | |
| Applicant KOENIG & BAUER AKTIENGESELLSCHAFT | | | | | | |
| This report is the international preli- under Article 35 and transmitted to the | | this International Preliminary Examining Authority | | | | |
| 2. This REPORT consists of a total of | 2. This REPORT consists of a total of 6 sheets, including this cover sheet. | | | | | |
| 3. This report is also accompanied by A | ANNEXES, comprising: | | | | | |
| a. (sent to the applicant and | i to the International Bureau) a total of 1 | 6 sheets, as follows: | | | | |
| | | een amended and are the basis for this report and/or see Rule 70.16 and Section 607 of the Administrative | | | | |
| | sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental | | | | | |
| b. (sent to the International | Bureau only) a total of (indicate type and n | umber of electronic carrier(s)) | | | | |
| , containing a sequence listing and/or tables | | | | | | |
| related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). | | | | | | |
| 4. This report contains indications relat | ing to the following items: | | | | | |
| Box No. I Basis of th | e report | | | | | |
| Box No. II Priority | | | | | | |
| Box No. III Non-estab | lishment of opinion with regard to novelty, i | inventive step and industrial applicability | | | | |
| Box No. IV Lack of un | Box No. IV Lack of unity of invention | | | | | |
| Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | | | | | |
| Box No. VI Certain do | Box No. VI Certain documents cited | | | | | |
| Box No. VII Certain de | fects in the international application | | | | | |
| Box No. VIII Certain ob | servations on the international application | | | | | |
| Date of submission of the demand | Date of completion | n of this report | | | | |
| | | | | | | |
| Name and mailing address of the IPEA/EP | Authorized officer | | | | | |
| | | | | | | |
| Facsimile No. | Telephone No. | | | | | |

Translation

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International application No.
PCT/EP2004/050378

| Box | No. I | Basis of the report | | |
|-----|---|---|--|---|
| 1. | | d to the language, this report is based on the internation | al application in the language in v | which it was filed, unless otherwise |
| | This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of: | | | |
| | international search (Rule 12.3 and 23.1(b)) | | | |
| | | publication of the international application (Rule 12.4) |) | |
| | | international preliminary examination (Rule 55.2 and/o | | |
| 2. | With regard receiving (| d to the elements of the international application, this in Office in response to an invitation under Article 14 are): | report is based on (replacement s.e. referred to in this report as "or | heets which have been furnished to the iginally filed" and are not annexed to |
| | the ir | nternational application as originally filed/furnished | | |
| | the d | lescription: | | |
| | page | s <u>1-42</u> | | as originally filed/furnished |
| | page | s* | received by this Authority on | |
| | page | ss* | received by this Authority on | |
| | the c | claims: | | |
| | nos. | 79-81 | | as originally filed/furnished |
| | nos. | * | as amended (togethe | r with any statement) under Article 19 |
| | nos. | . (2) | | 17.12.2004 with the |
| | nos. | | | |
| | | drawings: | | |
| | | • | | as originally filed/furnished |
| | shee | | anniered by this Authority on | |
| | shee | | | |
| | shee | | | |
| | a sec | quence listing and/or any related table(s) - see Supplem | nental Box Relating to Sequence I | isting. |
| 3. | The | amendments have resulted in the cancellation of: | | |
| | | the description, pages | | |
| | | the claims, nos. | | |
| | | the drawings, sheets/figs | | |
| | | the sequence listing (specify): | | |
| | | any table(s) related to sequence listing (specify): | | |
| 4. | Thi the | is report has been established as if (some of) the amen y have been considered to go beyond the disclosure as if | dments annexed to this report and iled, as indicated in the Supplement | I listed below had not been made, since ntal Box (Rule 70.2(c)). |
| | | the description, pages | | |
| | | the claims, nos. | | |
| Ì | \Box | the drawings, sheets/figs | | |
| | | the sequence listing (specify): | | |
| | | 1 | | |
| | If item 4 | applies, some or all of those sheets may be marked "su | | |

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| Box | No. V Reasoned statem citations and exp | ent under Art lanations sup | ticle 35(2) with regard to novelty, inventive step or industrial applicability; porting such statement | |
|-----|---|--------------------------------|--|------|
| 1. | Statement | | | |
| | Novelty (N) | Claims | 1-78 | YES |
| | | Claims | | _ NO |
| | Inventive step (IS) | | 1-78 | YES |
| | | Claims | | _ NO |
| | Industrial applicability (IA) | Claims | 1-78 | YES |
| | | Claims | | _ NO |
| 2. | Citations and explanations (Ru | e 70.7) | | |
| | Referenc | e is m | ade to the following documents: | |
| | D1: EP- | -A-1 05 | 9 800 (XEROX CORP) 13 December 2000 | |
| | D2: DE | 199 40 | 879 A (INNOMESS ELEKTRONIK GMBH) | |
| | 8 1 | March 2 | 2001 | |
| | D3: US- | -A-5 38 | 34 859 (BOLZA-SCHUNEMANN CLAUS A ET | |
| | AL | 24 Ja | nuary 1995 | |
| | D4: DE | 101 32 | 2 589 A (KOENIG & BAUER AG) 23 | |
| | Jaı | nuary 2 | 2003 | |
| | D5: JO | HNSON T | : "Methods for characterizing colour | |
| | sc | anners | and digital cameras" DISPLAYS, | |
| 1 | EL | SEVIER | SCIENCE PUBLISHERS BV., BARKING, GB, | |
| | Vo | 1. 16, | No. 4, 1 May 1996 (1996-05-01), | |
| | pa | ges 183 | 3-191, XP004032520 ISSN: 0141-9382 | |
| | | | 627 A (BARRETT-LENNARD DAVID ET AL) | |
| | | _ | nber 1998 | |
| | | | 973 A (LI HONG ET AL) 30 May 2000 | |
| | | | BSTRACTS OF JAPAN Vol. 1999, No. 05, | |
| | | May 19 | | |
| | D9: DE | _ | | |
| | D10: DE | | | |
| | D11: DE | | | |
| | D12: C. | Lucht, | , K. H. Franke: "Qualitätskontrolle | |

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

von bedruckter, textiler Bahnware ausgewählte Lösungsverfahren zur
Farbmusterinspektion": 5th Workshop on Colour
Image Processing, ZBS Publications Series
e.V., Report No. 1/99, Ilmenau, 1999, 9 pages
ISSN 1432-3346; Workshop on 07/08.10.1999

- D13: K. H. Franke, H. Kempe, C. Lucht,

 "Automatisierung der industriellen Warenschau
 bei komplexer gemusterter Bahnware eine
 Herausforderung an die Bildanalyse";
 Conference report, 42nd International
 Scientific Colloquium, TU Ilmenau 1997,
 7 pages
- D14: Final report on the co-operative research project "Neue Bildverarbeitungstechnologien für die automatisierte optische Kontrolle strukturierter Oberflächen in die Produktion", VDMA, Fachgemeinschaft Robotik + Automation, Industrial Image Processing Technical department, Frankfurt, 22.10.1999, 125 pages.
- 1. Claim 1 defines a method for the qualitative evaluation of a material comprising an identification feature, the method involving the following:
 - a) the colour image signals for the identification feature that have been captured and evaluated are compared with corresponding setpoint values in order to determine a colour deviation;
 - b) the identification feature is then tested

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

with respect to its affiliation with a specific class of identification features, or with respect to a specific contour or to its arrangement relative to at least one other identification feature of the material;

- c) at least two of these tests are carried out independently of one another in parallel signal paths;
- d) the tests are carried out in a current printing or processing stage of a machine printing or processing the material, the material being moved past a stationary image sensor;
- e) a position of the identification feature to be evaluated in the test procedure varies within a range of expectation defined by tolerance limits relative to a printed image on the material or to the edges of the material;
- f) a position of the position-variant identification feature is determined in one of the parallel signal paths.
- 1.1 The different features of claim 1 are known per se in the field of industrial quality control, but the cited documents do not disclose or suggest diverse and independent testing of identification features (steps a), b) and f) mentioned above) in parallel signal paths.
- 1.2 The subject matter of claim 1 is thus considered novel and inventive (PCT Article 33(2) and (3)).

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| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
|-----------|---|
| | |
| 2. | Dependent claims 2-78 further restrict the subject |
| | matter of claim 1 and therefore the subject matter |
| | thereof is also novel and inventive. |
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